Engineering Tips for Ceiling Lift Installation & Maintenance

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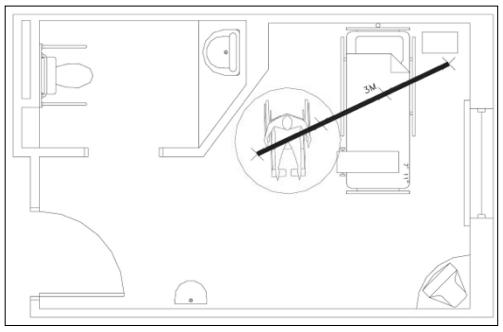
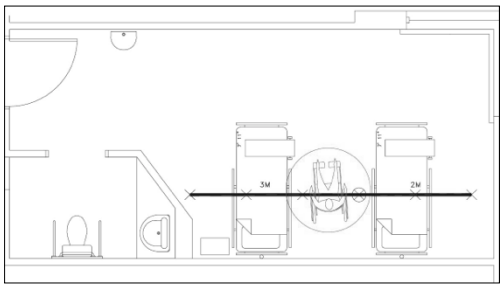
Engineering Considerations

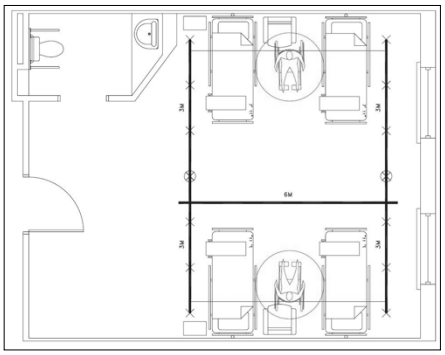
- **Items to include in the procurement request and/or process.**
  - **Structural review of the facility rooms for attachment of ceiling lift.**
  - **Fire Safety review of the facility rooms for clearances and sprinkler concerns.**
  - **Electrical review of the facility rooms for cables and their routing.**

Structures

- **Plan for a Structural Engineer to review the existing ceiling/roof structure to determine if it can support the additional load for the lift.**
- **If okay for ceiling attachment, have estimate performed for any non-lift work which must be performed. Include mechanical and electrical.**
- **Have independent Structural Engineer review submissions from lift vendor as part of submittal process. Don't forget seismic considerations.**
- **Remember, structural is only part of the full installation package.**







Fire and Life Safety

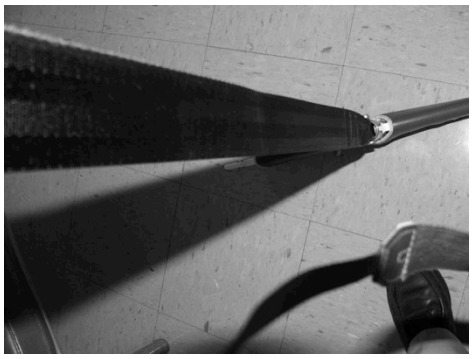
- **Vendor should provide a summary of fire sprinkler head issues, including blockage and clearance issues. Recommend PE certification.**
- **Vendor should address the parking location for lift drive unit and clearances required around the patient bed(s).**
- **Recommend lift rail systems not extend beyond the patient room due to interface at doorways.**
- **Remember bed curtains, IV poles, TVs, and how they will need to be relocated after installation.**

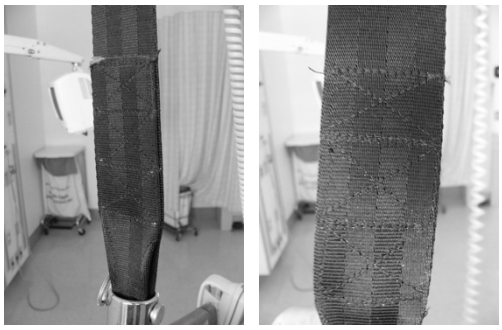
Electrical

- **Have an electrical engineer review submittals for compliance with NEC and NFPA 99.**
- **Have all power provided by a service receptacle which is part of the patient bedside circuit (either normal or emergency circuit).**
- **Have all metal parts located within the patient vicinity bonded and ground to the patient area ground point.**
- **Make sure the installation does not interfere with maintenance of lighting and HVAC systems.**

Maintenance Items

- **ALWAYS follow manufacturers inspection requirements AS A MINIMUM.**
- **Inspect structural above ceiling annually.**
- **Inspect structural below ceiling annually.**
- **Inspect motor and trolley components annually.**
- **Inspect electrical cords and connections annually.**
- **HAVE NURSING inspect the electrical cords, lift web belting, and safety cord BEFORE each use.**





For Questions

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